		DEPARTMENT	ATE OF UTAH OF NATURAL RES F OIL, GAS AND I			FOR		
APPLI	1. WELL NAME and	1. WELL NAME and NUMBER NBU 688-30E						
2. TYPE OF WORK DRILL NEW WELL	REENTER P8	A WELL DEEPE	N WELL		3. FIELD OR WILD	CAT NATURAL BUTTES		
4. TYPE OF WELL Gas We	ell Coalb	ed Methane Well: NO			5. UNIT or COMMU	JNITIZATION AGRE NATURAL BUTTES	EMENT NAME	
6. NAME OF OPERATOR KERR	R-MCGEE OIL & C	GAS ONSHORE, L.P.			7. OPERATOR PHO	ONE 307-752-1169		
8. ADDRESS OF OPERATOR P.O	. Box 173779, D	Denver, CO, 80217			9. OPERATOR E-M. Laura	AIL .Gianakos@anadarko.	.com	
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)		11. MINERAL OWNE	_		12. SURFACE OWN		<u> </u>	
ML22793	- (faal)	FEDERAL () IND	IAN STATE (FEE (IDIAN STATE	~ ~	
13. NAME OF SURFACE OWNER (if box 12						IER PHONE (if box 1		
15. ADDRESS OF SURFACE OWNER (if box	12 = 'fee')				16. SURFACE OWN	IER E-MAIL (if box	12 = 'fee')	
17. INDIAN ALLOTTEE OR TRIBE NAME		18. INTEND TO COM MULTIPLE FORMATI		ION FROM	19. SLANT			
(if box 12 = 'INDIAN')		YES (Submit Co	ommingling Applicat	ion) NO	VERTICAL 📵 DI	RECTIONAL (H	ORIZONTAL 🗍	
20. LOCATION OF WELL	FO	OTAGES	QTR-QTR	SECTIO	TOWNSHIP	RANGE	MERIDIAN	
LOCATION AT SURFACE	702 FN	IL 2029 FEL	NWNE	30	10.0 S	21.0 E	S	
Top of Uppermost Producing Zone	702 FN	IL 2029 FEL	NWNE	30	10.0 S	21.0 E	S	
At Total Depth	702 FN	IL 2029 FEL	NWNE	30	10.0 S	21.0 E	S	
21. COUNTY UINTAH		22. DISTANCE TO N	EAREST LEASE LIN 702	IE (Feet)	23. NUMBER OF A	CRES IN DRILLING 644	UNIT	
		25. DISTANCE TO NI (Applied For Drilling		SAME POOL	26. PROPOSED DE	PTH D: 7279 TVD: 7279)	
27. ELEVATION - GROUND LEVEL 5260		28. BOND NUMBER	22.7		29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABL 49-225			
		Aī	TTACHMENTS		'			
VERIFY THE FOLLOWING	ARE ATTACH	ED IN ACCORCANG	CE WITH THE U	ΓΑΗ OIL AN	D GAS CONSERVAT	ION GENERAL RU	JLES	
WELL PLAT OR MAP PREPARED BY	LICENSED SUR	VEYOR OR ENGINEER	COM	IPLETE DRILL	ING PLAN			
AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)				FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER				
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)			№ торо	OGRAPHICAL	МАР			
NAME Kaylene Gardner TITLE Regulatory Administrator			r	PHONE 4	435 781-9111			
SIGNATURE	DATE 0	3/02/2010		EMAIL k	aylene_gardner@eogresc	urces.com		
API NUMBER ASSIGNED 43047504440000	APPRO	VAL Bol	ogyill					
		Permit Manager	7 7					

	Proposed Hole, Casing, and Cement							
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)				
Cond	20	13.375	0	60				
Pipe	Grade	Length	Weight					
	Grade H-40 ST&C		48.0					

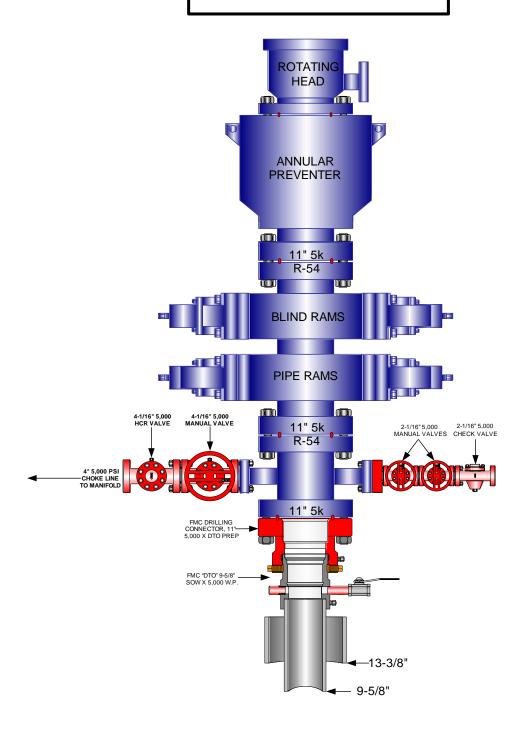
API Well No: 43047504440000

	Proposed Hole, Casing, and Cement								
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)					
Prod	7.875	4.5	0	7279					
Pipe	Grade	Length	Weight						
	Grade L-80 LT&C	7279	11.6						

	Proposed Hole, Casing, and Cement							
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)				
Surf	12.25	9.625	0	2300				
Pipe	Grade	Length	Weight					
	Grade J-55 ST&C	2300	36.0		П			

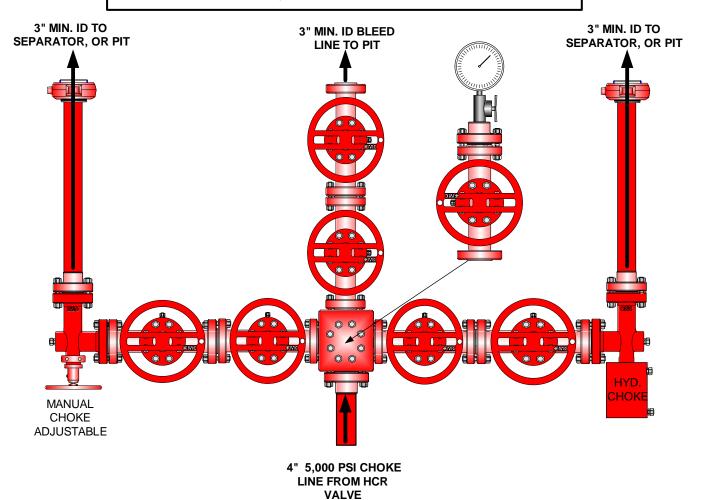
EOG RESOURCES 11" 5,000 PSI W.P. BOP CONFIGURATION

PAGE 1 OF 2



EOG RESOURCES CHOKE MANIFOLD CONFIGURATION W/ 5,000 PSI WP VALVES

PAGE 2 0F 2



Testing Procedure:

- 1. BOP will be tested with a professional tester to conform to Onshore Order #2.
- 2. Blind and Pipe rams will be tested to rated working pressure, 5,000 psi.
- 3. Annular Preventer will be tested to 50% working pressure, 2,500 psi. Casing will be tested to 0.22 psi / ft. or 1,500 psi. Not to exceed 70% of burst strength, whichever is greater.
- 4. All lines subject to well pressure will be tested to the same pressure as blind and pipe rams.
- 5. All BOPE specifications and configurations will meet Onshore Order #2 requirements.



Natural Buttes Unit 688-30E NWNE Section 30, T10S, R21E Uintah County, Utah

SURFACE USE PLAN

1. EXISTING ROADS:

- A. See attached Plats showing directional reference stakes on location, and attached TOPO Map "B" showing access to location from existing roads.
- B. The proposed well site is located approximately 47.7 miles from Vernal, Utah See attached TOPO Map "A".
- C. Refer to attached Topographic Map "A" showing labeled access route to location.
- D. Existing roads will be maintained and repaired as necessary.

2. PLANNED ACCESS ROAD:

- A. The access road will be approximately 90 feet in length, See attached Topo B.
- B. The access road has a 40-foot ROW w/18 foot running surface.
- C. Maximum grade of the new access road will be 8 percent.
- D. No turnouts will be required.
- E. Road drainage crossings shall be of the typical dry creek drainage crossing type.
- F. No bridges, or major cuts and fills will be required.
- G. The access road will be dirt surface.
- H. No gates, cattleguards, or fences will be required or encountered.
- I. A 40-foot permanent right-of-way is requested. No surfacing material will used.
- J. No additional storage areas will be needed for storing equipment, stockpiling, or vehicle parking.

All travel will be confined to existing access road rights-of-way.

New or reconstructed roads will be centerlined – flagged at time of location staking.

The road shall be constructed/upgraded to meet the standards of the anticipated traffic flow and all-weather road requirements. Construction/upgrading shall include ditching, draining, graveling, crowning, and capping the roadbed as necessary to provide a well constructed safe road. Prior to upgrading, the road shall be cleared of any snow cover and allowed to dry completely. Traveling off the 40 foot right-of-way will not be allowed. Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around then avoided.

As operator, EOG Resources, Inc. shall be responsible for all maintenance on cattleguards, or gates associated with this oil and/or gas operation.

Traveling off the 40 foot right-of-way will not be allowed. The access road and associated drainage structures will be constructed and maintained in accordance with road guidelines contained in the joint BLM/USFS publication: Surface Operating Standards for Oil and Gas Exploration and Development, Third Edition, and/or BLM Manual Section 9113 concerning road construction standards on projects subject to federal jurisdiction. During the drilling and production phase of operations, the road surface and shoulders will be kept in a safe and useable condition and drainage ditches and culverts will be kept clear and free flowing.

3. LOCATION OF EXISTING WELLS WITHIN A ONE-MILE RADIUS:

See attached TOPO map "C" for the location of wells within a one-mile radius.

4. LOCATION OF EXISTING AND/OR PROPOSED PRODUCTION FACILITIES:

A. On Well Pad

1. Production facilities will be set on location if the well is successfully completed for production. Facilities will consist of wellhead valves, combo separator-dehy unit with meter, two (2) 400-bbl vertical tanks and attaching piping.

All permanent (on site for six months or longer) structures constructed or installed (including pumping units) will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within 6 months of installation. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded.

B. Off Well Pad

- 1. Proposed pipeline will transport natural gas.
- 2. The pipeline will be a permanent feeder line.
- 3. The length of the proposed pipeline right-of-way is 65' x 40'. The proposed pipeline leaves the southern edge of the well pad (Lease ML22793) proceeding in

a southerly direction for an approximate distance of 65' tieing into an existing pipeline in the NWNE of Section 30, T10S, R21E. Pipe will be 4" NOM, 0.156 wall, Grade X42, Zap-Lock, electric weld with a 35 mil X-Tru coating.

- 4. Proposed pipeline will be a 4" OD steel, zap-lok line laid on the surface
- 5. Proposed pipeline will be laid on surface.
- 6. A 20-foot permanent pipeline right-of-way is requested. A 40-foot temporary pipeline right-of-way for construction purposes is requested, the temporary right-of-way will be utilized for a 10-day period.
- 7. Pipeline will be coupled using the Zap lock method. No additional off-pad facilities will be required.

All permanent (on site for six months or longer) structures constructed or installed (including pumping units) will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within 6 months of installation. All facilities will be painted with Carlsbad Canyon. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. Water supply will be from Ouray Bonanza Power Plant water source in Sec 26, T8S, R23E Uintah County, UT (State Water Right # 49-225(A31368)). Water will be hauled by a licensed trucking company.
- B. Water will be hauled by a licensed trucking company.

6. Source of Construction Materials:

- A. All construction material for this pipeline will be of native borrow and soil accumulated during the construction of the location.
- B. No mineral materials will be required.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. METHODS AND LOCATION

- 1. Cuttings will be confined in the reserve pit.
- 2. A portable toilet will be provided for human waste during the drilling and completion of the well. Disposal will be at the Vernal sewage disposal plant.
- 3. Burning will not be allowed. Trash and other waste material will be contained in a wire mesh cage and disposed of at the Uintah County Landfill.

- 4. Produced wastewater will be confined to a lined pit or storage tank for a period not to exceed 90 days after initial production. After the 90 day period, the produced water will be contained in a tank on location and then disposed of at one of the following locations: Natural Buttes Unit 21-20B SWD, Ace Disposal, CWU 550-30N SWD, CWU 2-29 SWD, Red Wash Evaporation Ponds, 1, 2, 3, 4, 5, and/or 6, Coyote Ponds 1, 2, 3, and/or 4, or EOG Resources, Inc. drilling operations (Chapita Wells Unit, Natural Buttes Unit & Stagecoach Unit).
- All chemicals will be disposed of at an authorized disposal site. Drip pans and absorbent pads will be used on the drilling rig to avoid leakage of oil to the pit.
- B. Water from drilling fluids and recovered during testing operations will be disposed of by either evaporating in the reserve pit or by removed and disposed of at an authorized disposal site. Introduction of well bore hydrocarbons to the reserve pit will be avoided by flaring them off in the flare pit at the time of recovery.

The reserve pit will be constructed so as not to leak, break, or allow discharge. If the reserve pit requires padding prior to lining (due to rocky conditions) felt padding will be used.

The reserve pit shall be lined with felt and a 16 millimeter plastic liner. Sufficient bedding (i.e. weed free straw, or hay; felt; polyswell or soil) to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit. More stringent protective requirements may be deemed necessary by the A.O.

EOG Resources, Inc. maintains a file, per 29 CFR 1910.1200 (g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances which are used during the course of construction, drilling, completion, and production operations for this project. Hazardous materials (substances) which may be found at the site may include drilling mud and cementing products which are primarily inhalation hazards, fuels (flammable and/or combustible), materials that may be necessary for well completion/ stimulation activities such as flammable or combustible substances and acids/gels (corrosives). The opportunity for Superfund Amendments and Reauthorization Act (SARA) listed Extremely Hazardous Substances (EHS) at the site is generally limited to proprietary treating chemicals. All hazardous and EHS and commercial preparations will be handled in an appropriate manner to minimize the potential for leaks or spills to the environment.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completion of the well. Furthermore, extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will not be used, produced, stored, transported, or disposed of in association with the drilling, testing or completion of the well.

8. ANCILLARY FACILITIES:

None anticipated.

9. WELL SITE LAYOUT:

- A. Refer to attached well site plat for related topography cuts and fills and cross sections.
- B. Refer to attached well site plat for rig layout and soil material stockpile location as approved on On-site.
- C. Refer to attached well site plat for rig orientation, parking areas, and access road.

The reserve pit will be located on the northeast corner of the location. The flare pit will be located downwind of the prevailing wind direction on the east side of the location, a minimum of 100 feet from the well head and 30 feet from the reserve pit fence.

The stockpiled pit topsoil (first six inches) will be stored separate from the location topsoil, and will not exceed 4inches in height. The stockpiled location topsoil will be stored in a location providing easy access for interim reclamation and protection of the topsoil. Upon completion of construction, the stockpiled topsoil from the location will be broadcast seeded with the approved seed mixture from this location and then walked down with a Caterpiller tractor.

Access to the well pad will be from the south.

FENCING REQUIREMENTS:

All pits will be fenced according to the following minimum standards:

- A. Thirty-nine inch net wire shall be used with at least one strand of barbed wire on top of the net wire. (Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.)
- B. The net wire shall be no more than 2 inches above the ground. The barbed wire strand shall be 3 inches above the net wire. Total height of the fence shall be at least 42 inches.
- C. Corner posts shall be cemented and/or braced in such a manner as to keep the fence tight at all times.
- D. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distances between any two posts shall be no greater than 16 feet.
- E. All wire shall be stretched by using a stretching device before it is attached to the corner posts.

The reserve pit fencing will be on the three sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until clean-up.

Each existing fence to be crossed by the access road shall be braced and tied off before cutting so as to prevent slacking of the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and, upon completion of construction, the fence shall be repaired to BLM or SMA specifications. A cattleguard with an adjacent 16 foot gate shall be installed in any fence where a road is regularly traveled. If the well is a producer, the cattleguards (shall/shall not) be permanently counted on concrete bases. Prior to crossing any fence located on Federal land, or any fence between Federal land and private land, the operator will contact the BLM, who will in turn contact the grazing permittee or owner of said fence and offer him/her the opportunity to be present when the fence is cut in order to satisfy himself/herself that the fence is adequately braced and tied off.

10. PLANS FOR RECLAMATION OF THE SURFACE:

A. Interim Reclamation (Producing Location)

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash, and junk not required for production.

Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with CFR 3162.7-1.

If a plastic nylon reinforced liner is used, it shall be torn and perforated before backfilling of the reserve pit.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours – See attached Figure #3. The reserve pit will be reclaimed within 90 days from the date of the well completion, or as soon as environmental conditions allow. Before any dirt takes place, the reserve pit must be completely dry and free of all foreign obstacles. The stockpiled pit topsoil will then be spread over the pit area and broadcast seeded with the prescribed seed mixture for this location. The seeded area will then be walked down with a cat.

B. Dry Hole/Abandoned Location

At such time as the well is plugged and abandoned, the operator will submit a subsequent report of abandonment and the BLM will attach the appropriated surface rehabilitation conditions of approval.

11. SURFACE OWNERSHIP:

Surface ownership of the proposed well site, and access road, is as follows:

State of Utah

OTHER INFORMATION:

- A. EOG Resources, Inc. will inform all persons in the area who are associated with this project that they are subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator will immediately stop work that might further disturb such materials, and contact the Authorized Officer. Within five working days the Authorized Officer will inform the operator as to:
 - Whether the materials appear eligible for the National Register of Historic Places:
 - The mitigation measures the operator will likely have to undertake before the site can be used.
 - A time frame for the Authorized Officer to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the Authorized Officer are correct and that mitigation is appropriate.

If the operator wished, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the Authorized Officer will assume responsibility for whatever recordation and stabilization of the exposed materials that may be required. Otherwise, the operator will be responsible for mitigation costs. The Authorized Officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer that required mitigation has been completed, the operator will then be allowed to resume construction.

- B. As operator, EOG Resources, Inc. will control noxious weeds along Right-of-Ways for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds will be obtained from the BLM administered land, a Pesticide Use proposal shall be submitted, and given approval, prior to the application or herbicides or other pesticides or possible hazardous chemicals.
- C. Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on BLM lands after the conclusion of drilling operations or at any other time without BLM authorization. However, if BLM authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities. (The BLM does not seek to compete with private industry. There are commercial facilities available for stacking and storing drilling rigs.)
- D. The drilling rig and ancillary equipment will be removed from the location prior to commencement of completion operations. Completion operations will be conducted utilizing a completion/workover rig.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice of Lessees. The operator is fully responsible for

the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Construction activity will not be conducted using frozen or saturated soils material or during periods when watershed damage is likely to occur.

If the existing access road, proposed access road, and proposed pad are dry during construction, drilling, and completion activities, water will be applied, as needed, to help facilitate compaction during construction and to minimize soil loss as a result of wind erosion.

LESSEE OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION:

PERMITTING AGENT

Kaylene R. Gardner EOG Resources, Inc. P.O. Box 1815 Vernal, Ut 84078 (435) 781-9111

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to insure compliance.

CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by EOG Resources, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Please be advised that EOG Resources, Inc. is considered to be the operator of the Natural Buttes Unit 688-30E Well, located in the NWNE, of Section 30, T10S, R21E, Uintah County, Utah; State land and minerals; and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond Coverage is under Bond # NM 2308.

May 19, 2009	
Date	Kaylene R. Gardner, Regulatory Administrator

⊇,

NW/NE, SEC.30, T10S, R21E, S.L.B.&M.. UINTAH COUNTY, UTAH

1. & 2. ESTIMATED TOPS & ANTICIPATED OIL, GAS, & WATER ZONES:

FORMATION	TVD-RKB (ft)	Objective	Lithology	
Green River	1,205		Shale	
Birdsnest Zone	1,382		Dolomite	
Mahogany Oil Shale	1,825		Shale	
Wasatch	4,352	Primary	Sandstone	Gas
Chapita Wells	4,945	Primary	Sandstone	Gas
Buck Canyon	5,661	Primary	Sandstone	Gas
North Horn	6,515	Primary	Sandstone	Gas
TD	7,279			

Estimated TD: 7,279' or 200'± below TD Anticipated BHP: 3,974 Psig

1. Fresh Waters may exist in the upper, approximately 1,000 ft \pm of the Green River Formation, with top at about 2,000 ft \pm .

2. Cement isolation is installed to surface of the well isolating all zones by cement.

3. PRESSURE CONTROL EQUIPMENT:

Production Hole – 5000 Psig

BOP schematic diagrams attached.

4. CASING PROGRAM:

CASING	Hole Size	<u>Length</u>	<u>Size</u>	WEIGHT	Grade	Thread	Rating Collapse	Factor Burst	<u>Tensile</u>
Conductor	20"	0 – 60'	14"	32.5#	A-252	STC		1,880 PSI	10,000#
Surface	12 1/4"	0' - 2,300' KB±	9-5/8"	36.0#	J-55	STC	2020 PSI	3520 Psi	394,000#
Production	7-7/8"	Surface - TD	4-1/2"	11.6#	N-80	LTC	6350 PSI	7780 Psi	233,000#

Note: 12-1/4" surface hole will be drilled to a total depth of 200'± below the base of the Green River lost circulation zone and cased w/9-5/4" as shown to that depth. Drilled depth may be shallower or deeper than the 2300' shown above depending on the actual depth of the loss zone.

All casing will be new or inspected.

NW/NE, SEC.30, T10S, R21E, S.L.B.&M.. UINTAH COUNTY, UTAH

5. Float Equipment:

Surface Hole Procedure (0'- 2300'±)

Guide Shoe

Insert Float Collar (PDC drillable)

Centralizers: 1-5' above shoe, top of jts. #2 and #3 then every 5th joint to surface. (15 total)

Production Hole Procedure (2300'± - TD):

Float shoe, 1 joint casing, float collar and balance of casing to surface. 4-½", 11.6#, N-80 or equivalent marker collars or short casing joints to be placed at top of Price River and 400' above top of Wasatch. Centralizers to be placed 5' above shoe on joint #1, top of joint #2, and every 2nd joint to 400' above Wasatch Island top. Thread lock float shoe, top and bottom of float collar, and top of 2nd joint.

6. MUD PROGRAM

Surface Hole Procedure (Surface - 2300'±):

Air/air mist or aerated water.

Production Hole Procedure (2300'± - TD):

Anticipated mud weight 9.5 – 10.5 ppg depending on actual wellbore conditions encountered while drilling.

2300'± - TD A closed mud system will be utilized. A bentonite gelled water mud system will be used to control viscosity w/PHPA polymer used for supplemental viscosity and clay encapsulation/inhibition. Water loss will be maintained at <15cc's using white starch or PAC. Bactericides will be used as needed. Anticipated pH will range from 9.0-10.0. Mud weight will be adjusted as necessary for well control. Deflocculants/thinners will be used as necessary to maintain mud quality. LCM sweeps will be utilized as necessary to control lost circulation and mud loss. CO2 contamination, if encountered, will be treated with lime and gypsum.

NW/NE, SEC.30, T10S, R21E, S.L.B.&M.. UINTAH COUNTY, UTAH

7. VARIANCE REQUESTS:

Reference: Onshore Oil and Gas Order No. 1

Onshore Oil and Gas Order No. 2 - Section E: Special Drilling Operations

- EOG Resources, Inc. requests a variance to regulations requiring a straight run blooie line to be 100' in length. (Where possible, a straight run blooie line will be used).
- EOG Resources, Inc. requests a variance to regulations requiring the blooie line to be 100' in length. To reduce location excavation, the blooie line will be approximately 75' in length.
- EOG Resources, Inc. requests a variance to regulations, during air drilling operations only, requiring dedusting equipment. Dust during air drilling operations is controlled by water mist.
- EOG Resources, Inc. requests a variance to regulations, during air drilling operations only, requiring an automatic igniter or continuous pilot light on the blooie line. (Not required on aerated water system).
- EOG Resources, Inc. requests a variance that compressors are located in the opposite direction from the blooie line a minimum of 100 feet from the well bore. (Air Compressors are rig mounted).

8. EVALUATION PROGRAM:

Logs: Mud log from base of surface casing to TD.

Cased-hole Logs: Cased-hole logs will be run in lieu of open-hole logs consisting of the following: Cement

Bond / Casing Collar Locator and Pulsed Neutron

NW/NE, SEC.30, T10S, R21E, S.L.B.&M.. UINTAH COUNTY, UTAH

9. CEMENT PROGRAM:

Surface Hole Procedure (Surface - 2300'±):

Lead: 185 sks Class "G" cement with 16% Gel, 10 #/sx Gilsonite, 3% Salt, 2% CaCl₂, 3 lb/sx

GR3 ¼ #/sx Flocele mixed at 11 ppg, 3.82 ft³/sk. yield, 23 gps water.

Tail: 207 sks Class "G" cement with 2% CaCl₂, ¼#/sk Flocele mixed at 15.6 ppg, 1.18 ft³/sk., 5.2 gps

water.

Top Out: As necessary with Class "G" cement with 2% CaCl₂, ¼#/sk Flocele mixed at 15.6 ppg,

1.18 ft³/sk., 5.2 gps water.

Note: Cement volumes will be calculated to bring lead cement to surface and tail cement to

500'above the casing shoe.

Production Hole Procedure (2300'± - TD)

Lead: 110 sks: Hi-Lift "G" w/12% D20 (Bentonite), 1% D79 (Extender), 5% D44

(Salt),0.2% D46 (Antifoam), 0.25% D112 (Fluid Loss Additive), 0.25 pps D29 (cello

flakes) mixed at 11.0 ppg, 3.91 ft³/sk., 24.5 gps water.

Tail: 595 sks: 50:50 Poz "G" w/ 2% D20 (Bentonite), 0.1% D46 (Antifoam), 0.075%

D13 (Retarder), 0.2% D167 (Fluid Loss Additive), 0.2% D65 (Dispersant), mixed at 14.1

ppg, 1.28 ft³/sk., 5.9gps water.

Note: The above number of sacks is based on gauge-hole calculation.

Lead volume to be calculated to bring cement to 200'± above 9-5/8" casing shoe. Tail volume to be calculated to bring cement to 400'± above top of Wasatch.

Final Cement volumes will be based upon gauge-hole plus 45% excess.

10. ABNORMAL CONDITIONS:

Surface Hole (Surface - 2300'±):

Lost circulation

Production Hole (2300'± - TD):

Sloughing shales, lost circulation and key seat development are possible in the Wasatch Formation.

NW/NE, SEC.30, T10S, R21E, S.L.B.&M.. UINTAH COUNTY, UTAH

11. STANDARD REQUIRED EQUIPMENT:

- A. Choke Manifold
- B. Upper and Lower Kelly Cock
- C. Stabbing Valve
- D. Visual Mud Monitoring

12. HAZARDOUS CHEMICALS:

No chemicals subject to reporting under SARA title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

13. Air Drilling Operations:

- 1. Main Air Compressors are 1250 CFM 350 psi with 2000 psi Boosters and are rig mounted.
- 2. Secondary Air Compressors are 1170 CFM 350 psi with 2000 psi Boosters and are rig mounted.
- Minimum setting depth of conductor casing will be 60' GL or 10'± into competent formation, whichever is deeper, as determined by the EOG person in charge. Exceptions must be approved by an EOG drilling superintendent or manager.
- 4. The diameter of the diverter flow line will be a minimum of 10" to help reduce back pressure on the well bore during uncontrolled flow.
- 5. Rat and Mouse hole drilling will occur only after surface casing has been set and cemented.
- 6. EOG Resources, Inc. will use a properly maintained and lubricated stripper head.

(Attachment: BOP Schematic Diagram)

EOG RESOURCES, INC.

NBU #688-30E

LOCATED IN UINTAH COUNTY, UTAH SECTION 30, T10S, R21E, S.L.B.&M.



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



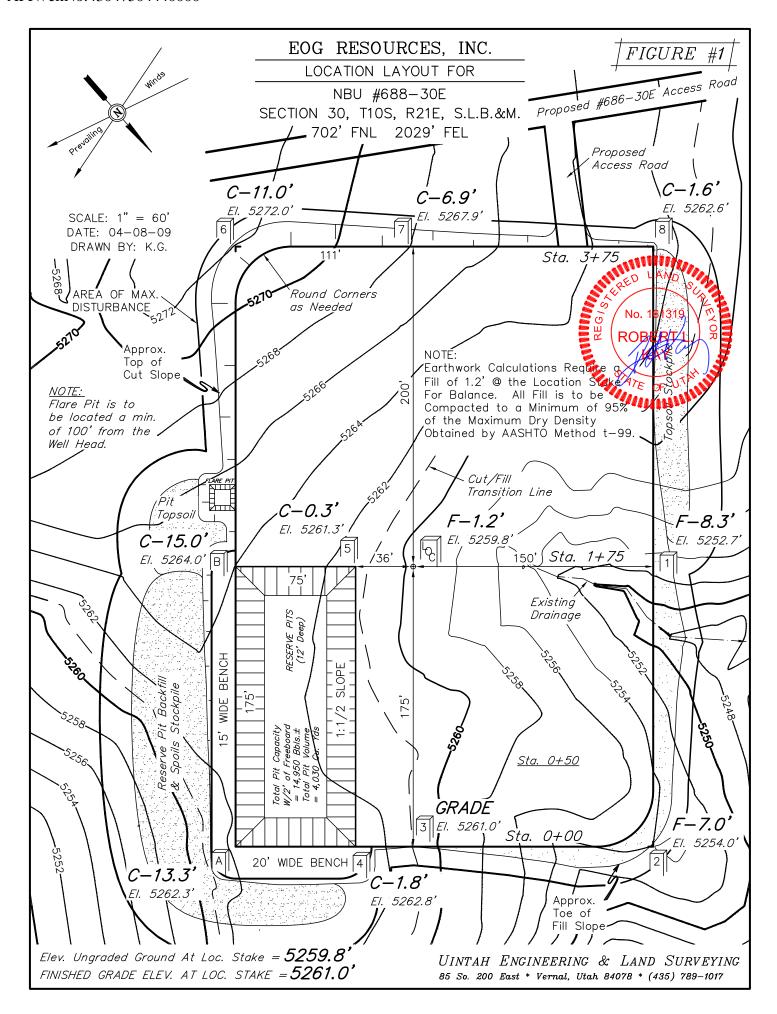
PHOTO: VIEW FROM BEGINNING OF THE PROPOSED ACCESS

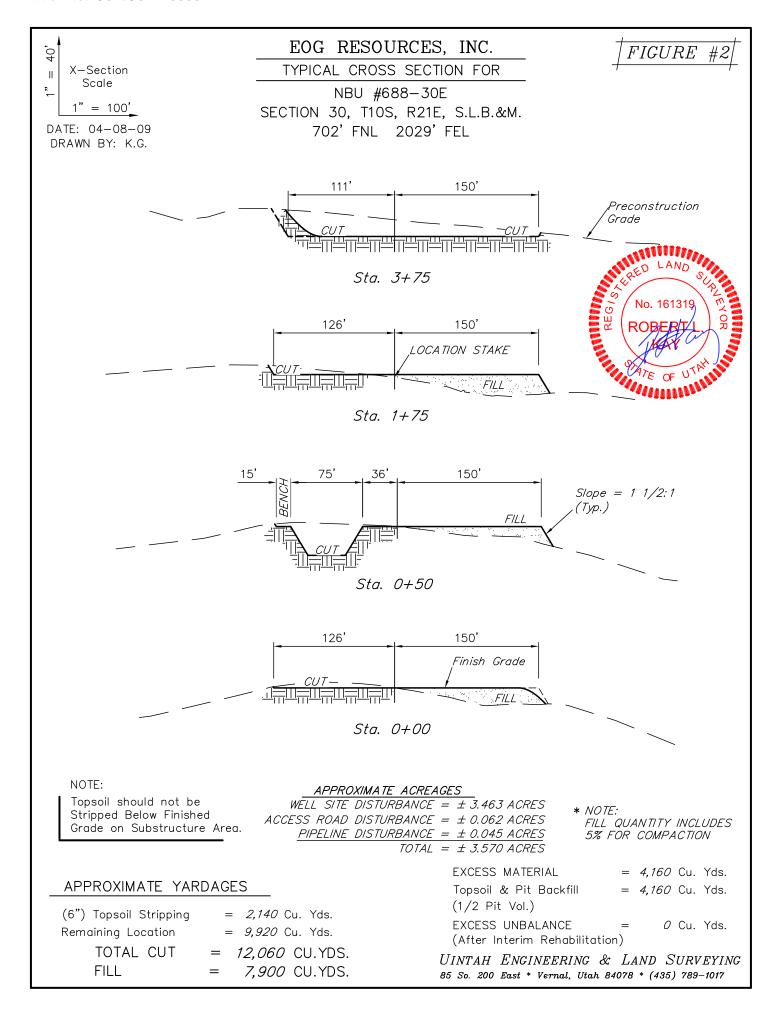
CAMERA ANGLE: NORTHEASTERLY

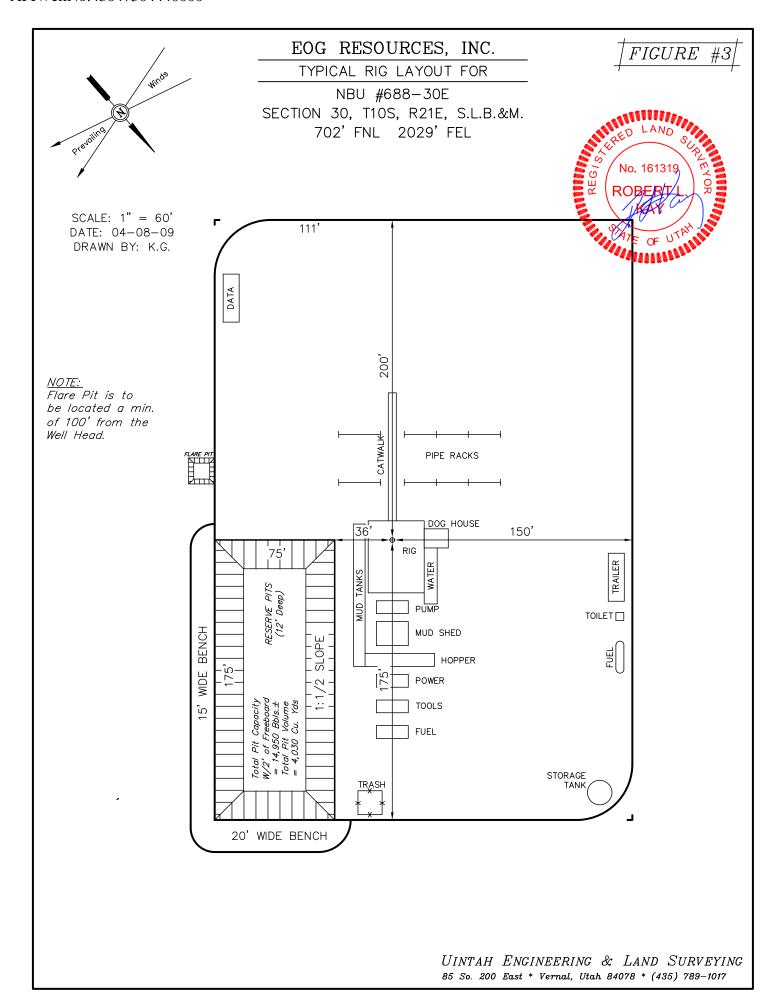


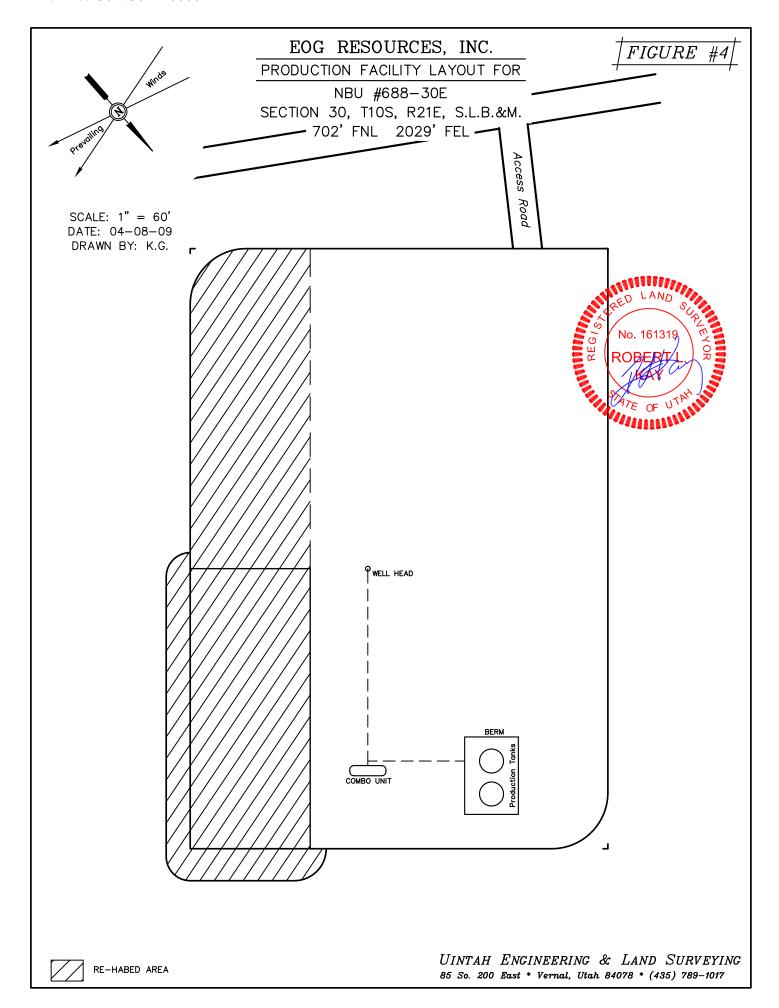
LOCATION	PHOTOS	04 MONTH	02 DAY	09 YEAR	РНОТО
TAKEN BY: G.S.	DRAWN BY: Z.L	. REV	ISED: 0	0-00-00	

⊇,







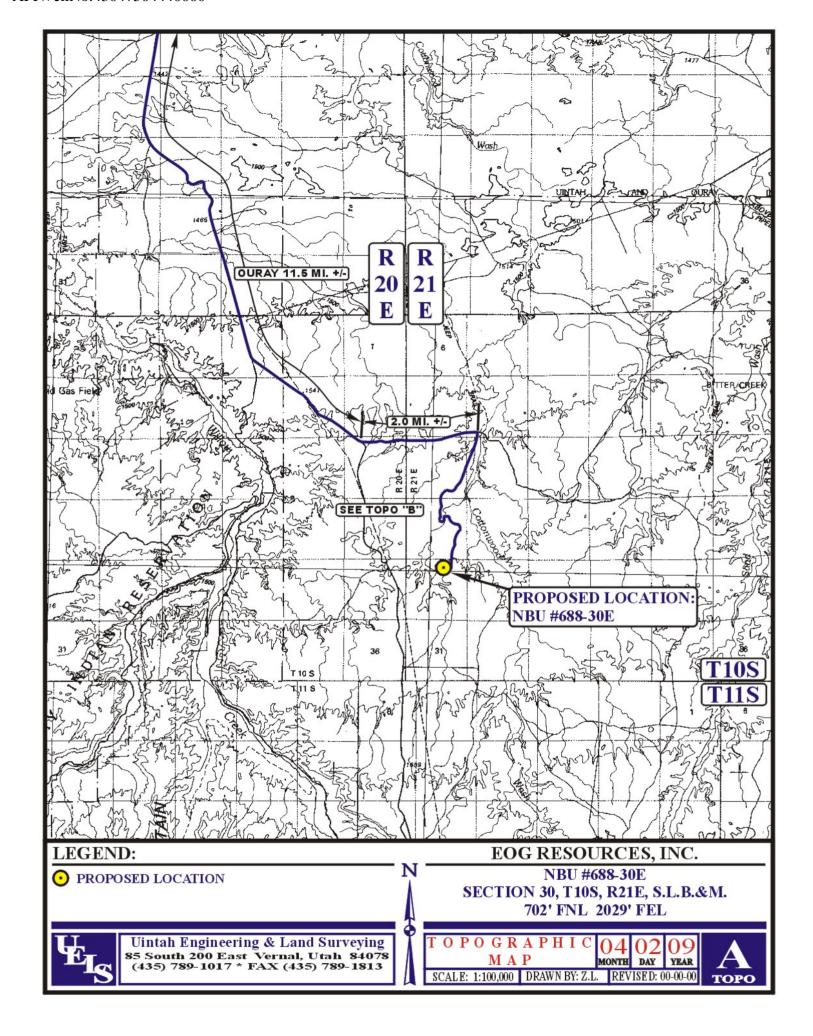


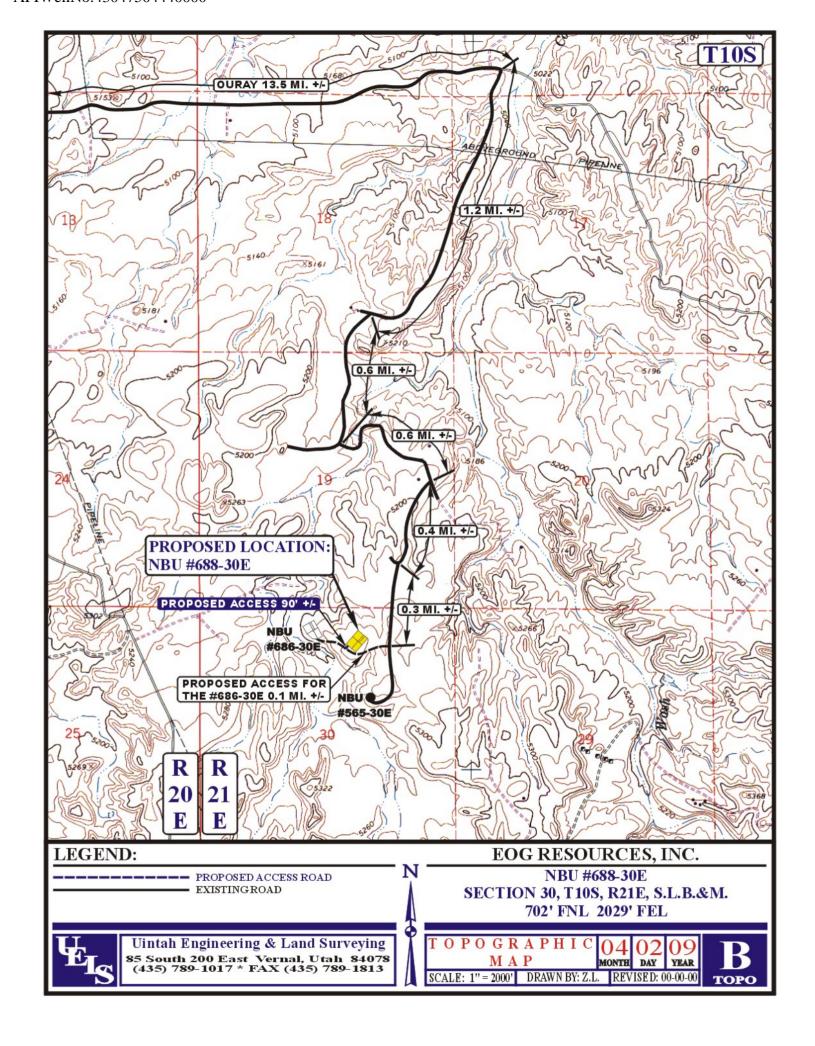
EOG RESOURCES, INC.

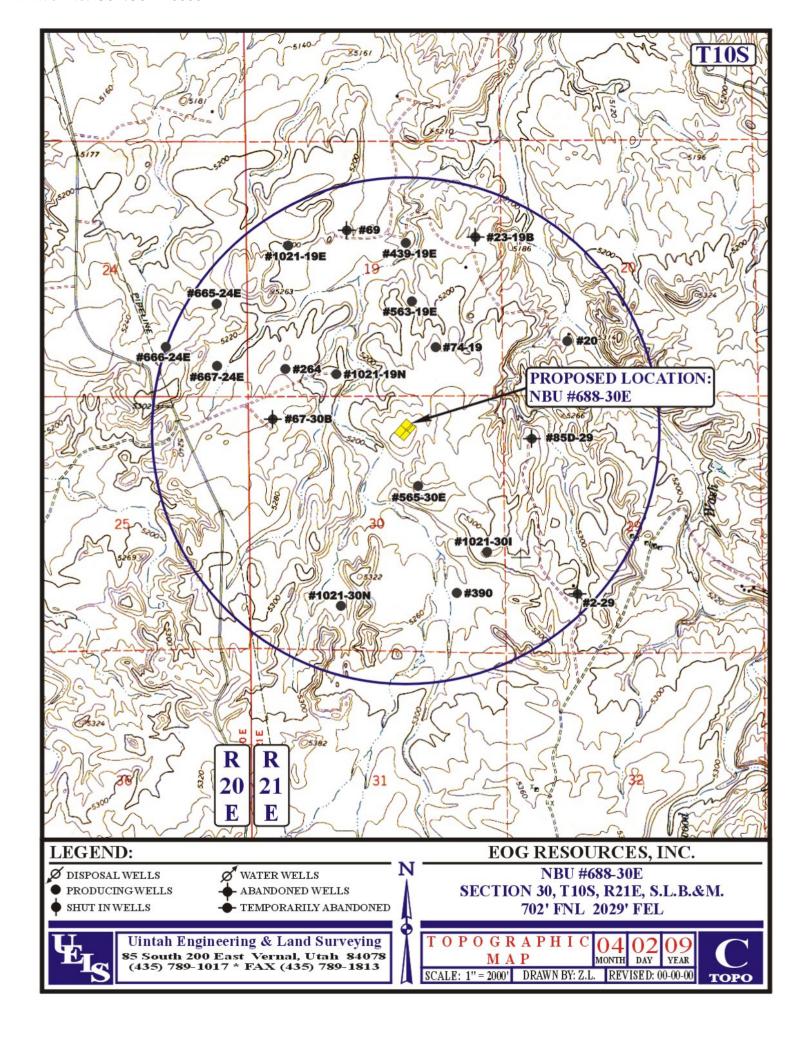
NBU #688-30E SECTION 30, T10S, R21E, S.L.B.&M.

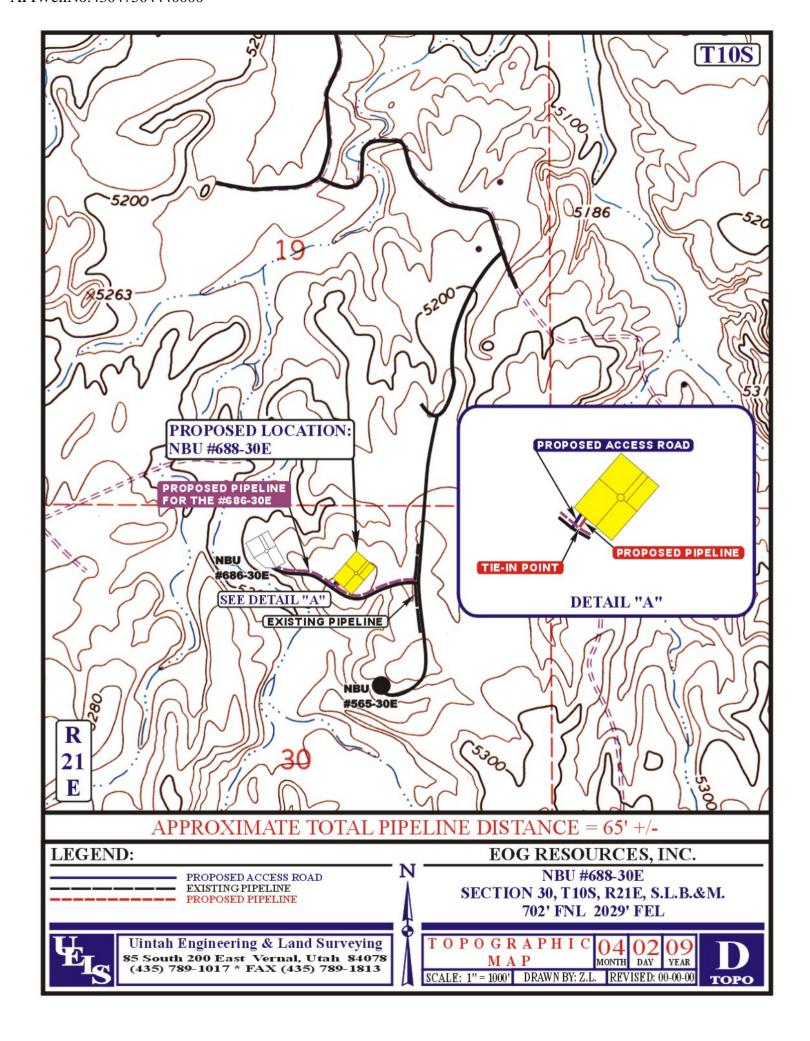
PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 11.5 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 2.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 1.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN LEFT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN NORTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST: TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #686-30E TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 90' TO THE PROPOSED LOCATION.

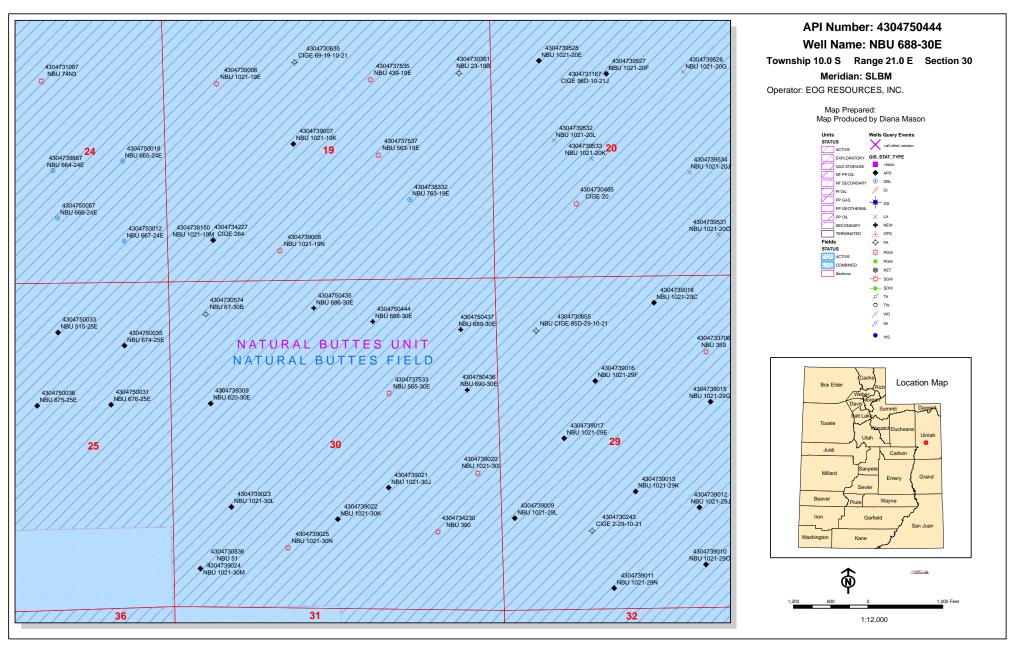
TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 47.7 MILES.











BOPE REVIEW EOG Resources, Inc. NBU 688-30E 43047504440000

Well Name	EOG Resources, Inc. NBU 688-30E 43047504440000				
String	Cond	Surf	Prod		
Casing Size(")	13.375	9.625	4.500		
Setting Depth (TVD)	60	2300	7279		
Previous Shoe Setting Depth (TVD)	0	60	2300		
Max Mud Weight (ppg)	8.3	10.5	10.5		
BOPE Proposed (psi)	0	500	5000		
Casing Internal Yield (psi)	1500	3520	7780		
Operators Max Anticipated Pressure (psi)	3974		10.5		

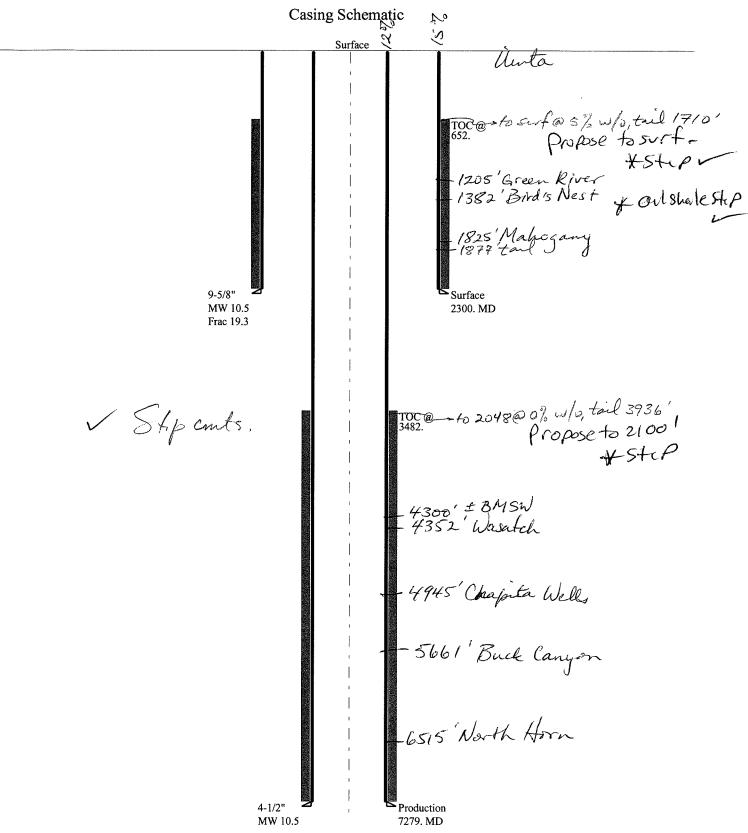
Calculations	Cond String	13.375	"
Max BPH (psi)	.052*Setting Depth*MW=	26	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	19	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	13	NO OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth)=	13	NO
Required Casing/BOPE Test Pressure=		60	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient

Calculations	Surf String	9.625	"
Max BPH (psi)	.052*Setting Depth*MW=	1256	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	980	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	750	NO OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth)=	763	NO Reasonable depth in area
Required Casing/BOPE To	est Pressure=	2300	psi
*Max Pressure Allowed @ Previous Casing Shoe=		60	psi *Assumes 1psi/ft frac gradient

Calculations	Prod String	4.500	"
Max BPH (psi)	.052*Setting Depth*MW=	3974	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3101	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	2373	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth)=	2879	NO Reasonable, note max allowed pressure
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2300	psi *Assumes 1psi/ft frac gradient

Calculations	String		"
Max BPH (psi)	.052*Setting Depth*MW=		
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe Max BHP22*(Setting Depth - Previous Shoe Depth)=			NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

43047504440000 NBU 688-30E



43047504440000 NBU 688-30E Well name:

EOG Resources, Inc. Operator:

Surface String type:

Project ID:

43-047-50444-0000

UINTAH COUNTY Location:

Minimum design factors: **Environment:** Design parameters: H2S considered?

Collapse: **Collapse**

Mud weight: 10.500 ppg

Design is based on evacuated pipe.

Design factor 1.125

Surface temperature: Bottom hole temperature:

106 °F 1.40 °F/100ft Temperature gradient: 100 ft

Minimum section length:

Burst:

Design factor 1.00 Cement top:

652 ft

No

74 °F

Burst

Max anticipated surface

2,024 psi pressure: Internal gradient: 0.120 psi/ft

Calculated BHP 2,300 psi

No backup mud specified.

Directional well information: Tension:

8 Round STC: 1.80 (J) 1.70 (J) Departure at shoe: 8 Round LTC: 24 ft 1.60 (J)

Buttress: Premium: 1.50 (J) Body yield: 1.50 (B)

Tension is based on air weight. 1,942 ft Neutral point:

Kick-off point 0 ft

Maximum dogleg: 2 °/100ft 5.17°

Inclination at shoe: Re subsequent strings:

Next setting depth: 7,269 ft Next mud weight: 10.500 ppg Next setting BHP: 3,965 psi 19.250 ppg

Fracture mud wt: Fracture depth: Injection pressure:

2,300 ft 2,300 psi

End True Vert Measured Drift Est. Nominal Run Segment **Finish** Depth Depth Diameter Cost Length Size Weight Grade Seq (ft) (in) (lbs/ft) (ft) (ft) (in) (\$) 19991 2299 2300 8.796 1 2300 9.625 36.00 J-55 ST&C

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	1254	2020	1.611	2300	3520	1.53	82.8	394	4.76 J

Helen Sadik-Macdonald Prepared by: Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: June 22,2009 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2299 ft, a mud weight of 10.5 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Well name:

43047504440000 NBU 688-30E

Operator:

EOG Resources, Inc.

String type:

Production

Location:

UINTAH COUNTY Project ID:

43-047-50444-0000

Design parameters:

Collapse

Mud weight: Design is based on evacuated pipe.

10.500 ppg

Collapse:

Minimum design factors: Design factor 1.125

Environment:

H2S considered?

No 74 °F

Surface temperature: Bottom hole temperature:

176 °F

Temperature gradient: Minimum section length: 1.40 °F/100ft 100 ft

1.00

1.80 (J)

1.80 (J)

1.60 (J)

1.50 (J)

1.60 (B)

Burst

Max anticipated surface

pressure:

2.369 psi 0.220 psi/ft

Internal gradient: Calculated BHP

No backup mud specified.

3,970 psi

Burst: Design factor

Premium:

Tension: 8 Round STC:

8 Round LTC: Buttress:

Body yield:

Tension is based on air weight. Neutral point: 6,137 ft Cement top:

3,482 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (Ibs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	7279	4.5	11.60	L-80	LT&C	7279	7279	3.875	33725
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	3970	6350	1.599	3970	7780	1.96	84.4	212	2.51 J

Prepared

by:

Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: June 22,2009 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 7279 ft, a mud weight of 10.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

X Change of Operator (Well Sold)

Operator Name Change

Designation of Agent/Operator Merger

R	OUTING
1.	DJJ
2.	CDW

-	The operator of the well(s) listed below has char	iged,	effectiv	re:			1/1/2010		
F	ROM: (Old Operator):		····		TO: (New O	geng na manangan nya pagama	orania madigasta.	and other state for the same	ne sette territikan bila
1	9550-EOG Resources				N2995-Kerr-M		Gas Onshe	re ID	
	1060 E Hwy 40		outh 1200 E		nc., 1.1				
	Vernal, UT 84078					UT 84078	ası		
Ph	Phone: 1-(435) 781-9111				Phone: 1-(435)				
1111	CA No.				Unit:	701-7024	NATURA	L BUTT	ES
W	ELL NAME(S)		TWN	RNG	API NO	ENTITY	LEASE	WELL	WELL
			1 ,,,,	10.0		NO	TYPE	TYPE	STATUS
	SEE ATTACHED				11 SATE OF STORY AND THE STORY	110	1111	1.1.1	STATES
_			_						
	PERATOR CHANGES DOCUMENT	ATI	ON						
_	ter date after each listed item is completed								
1.	(R649-8-10) Sundry or legal documentation wa						12/24/2009		
2.	(R649-8-10) Sundry or legal documentation was				_		12/24/2009		
3.	The new company was checked on the Departs		of Con				s Database	on:	3/7/2006
4.	Is the new operator registered in the State of U	tah:	_	YES	Business Numb	er: 1	355743-01	81	
6a.	(R649-9-2)Waste Management Plan has been re	eceive	d on:		IN PLACE				
6b.	Inspections of LA PA state/fee well sites comp	lete o	n:		n/a				
7.	Federal and Indian Lease Wells: The BLM a	nd or	the BIA	A has a	pproved the mer	ger, name	change,		
	or operator change for all wells listed on Feder	al or I	ndian 1	eases o	n:	BLM	not yet	BIA	n/a
8.	Federal and Indian Units:						•		•
	The BLM or BIA has approved the successor	of ur	it oper	ator for	r wells listed on:		not yet		
9.	Federal and Indian Communization Agreem							_	
	The BLM or BIA has approved the operator:	for all					n/a	_	
10.					vision has appro			isfer of A	uthority to
	Inject, for the enhanced/secondary recovery un	it/pro	ject for	the wa	ter disposal wel	l(s) listed o	n:	n/a	
DA	ATA ENTRY:				Maria de la capación				
1.	Changes entered in the Oil and Gas Database				1/31/2010		i da maria e di ili.		
2.	Changes have been entered on the Monthly Op	perato	or Chai	nge Sp			1/31/2010	<u>- :</u>	
3.	Bond information entered in RBDMS on:				1/31/2010				
4.	Fee/State wells attached to bond in RBDMS on				1/31/2010				
5.	Injection Projects to new operator in RBDMS of	on:			n/a				
_	OND VERIFICATION:								
1.	Federal well(s) covered by Bond Number:				WYB000291				
2.	Indian well(s) covered by Bond Number:				n/a	_			
	(R649-3-1) The NEW operator of any state or a					Number	22013542	_	
	The FORMER operator has requested a release	of lial	bility fr	om the	ir bond on:	n/a			
co	MMENTS:								

EOG transferred all their leases and permits in NBU to Kerr-McGee effective January 1, 2010

STATE OF UTAH

DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER: ML-22793
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT OF CA AGREEMENT NAME: Natural Buttes
1. TYPE OF WELL OIL WELL GAS WELL 🗸 OTHER	8. WELL NAME and NUMBER: Natural Buttes Unit 688-30E
2. NAME OF OPERATOR:	9. API NUMBER:
EOG Resources, Inc. 3. ADDRESS OF OPERATOR: IPHONE NUMBER:	43-047-50444 10. FIELD AND POOL, OR WILDCAT:
1060 East Highway 40 CHY Vernal STATE UT ZIP 84078 (435) 781-9111	Natural Buttes
4. LOCATION OF WELL	
FOOTAGES AT SURFACE: 702' FNL & 2029' FEL 39.923917 LAT 109.592394 LON	COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNE 30 10S 21E S	STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO	ORT, OR OTHER DATA
TYPE OF SUBMISSION TYPE OF ACTION	
✓ NOTICE OF INTENT ☐ ACIDIZE ☐ DEEPEN	REPERFORATE CURRENT FORMATION
(Submit in Duplicate) ALTER CASING FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start: CASING REPAIR NEW CONSTRUCTION	TEMPORARILY ABANDON
CHANGE TO PREVIOUS PLANS OPERATOR CHANGE	TUBING REPAIR
CHANGE TUBING PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK (Submit Original Form Only)	WATER DISPOSAL
Date of work completion: CHANGE WELL STATUS PRODUCTION (START/RESUME)	WATER SHUT-OFF
COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE	OTHER:
CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION	V
DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volunties. Described on the control of	i the attached list ("the Subject
As of January 1, 2010, Kerr-McGee Oil & Gas Onshore LP will be considered to be the operand will be responsible under the terms and conditions of the applicable lease for the operal lands. Bond coverage is provided under Kerr-McGee Oil & Gas Onshore LP's Nationwide Kerr-McGee Oil & Gas Onshore LP 1099 18th Street, Suite 1800	ations conducted upon the leased
Denver, CO 80202-1918	
By: Date: 12/17/2009 Michael A. Nixson Agent and Attorney-in-Fact	
NAME (PLEASE PRINT) J Michael Schween TITLE Agent and Attor	ney-in-Fact
SIGNATURE	
This space for State use only)	

APPROVED //31/2010

Coulene Russell

Division of Oil, Gas and Mining (See

(See Instructions on Reverse Side)

Earlene Russell, Engineering Technician

From: Jim Davis

To: Bonner, Ed; Mason, Diana

CC: Danielle Piernot; Garrison, LaVonne; kathy.schneebeckdulnoan@anadarko.com

Date: 2/25/2010 2:24 PM

EOG/Kerr McGee well approvals Subject:

The following wells have been approved by SITLA including arch and paleo clearance.

4304750435 NBU 686-30E 4304750436 NBU 690-30E 4304750437 NBU 689-30E 4304750444 NBU 688-30E 4304750546 NBU 696-25E 4304750547 NBU 697-25E 4304750548 NBU 698-25E 4304750545 NBU 693-25E 4304750554 NBU 700-25E

-Jim

Jim Davis **Utah Trust Lands Administration** jimdavis1@utah.gov

Phone: (801) 538-5156

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P.

Well Name NBU 688-30E

API Number 43047504440000 APD No 1576 Field/Unit NATURAL BUTTES

Location: 1/4,1/4 NWNE **Sec** 30 **Tw** 10.0S **Rng** 21.0E 702 FNL 2029 FEL

GPS Coord (UTM) Surface Owner

Participants

Floyd Bartlett (DOGM), Kaylene Gardner, Robert Wilkins and Keith Norbeck (EOG Resources) and Jim Davis (SITLA).

Regional/Local Setting & Topography

The general area is within the Natural Buttes Unit in the middle portion of the Cottonwood Wash Drainage of Uintah County. The area is characterized by rolling hills and benches, which are frequently intersected by somewhat gentle draws. The draws are occasionally rimed with steep side hills, which have exposed sand stone bedrock cliffs along the rims. Cottonwood Wash is an ephemeral drainage, which drains northerly approximately 6 miles to the White River. No seeps, springs or streams exist in the area. An occasional pond, constructed to store runoff for cattle and livestock exists.

This location is approximately 16.5 road miles southeast of Ouray, Utah and is accessed by the Seep Ridge Road then by Uintah County and existing or planned oil field development roads to within 90 feet of the proposed site. New construction will be required from this point.

The proposed NBU 688-30E gas well pad is toward the north end of a broad flat. The north end of the pad breaks off into a small swale which will be filled during construction. This swale continues and becomes deeper as it joins one from the east. The combine draw continues into Cottonwood wash about ½ mile away. No diversions are needed.

Kayleen Gardner stated that a closed loop mud circulation system would be used rather than construct a reserve pit as shown in the Location Layout plan.

The selected location appears to be a suitable site for drilling and operating a well, and is the best site in the immediate area

Both the surface and minerals for this location are owned by SITLA.

Surface Use Plan

Current Surface Use

Grazing Recreational Wildlfe Habitat

New Road Miles Well Pad Src Const Material Surface Formation

0.01 Width 276 Length 375 Onsite UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

3/1/2010 Page 1

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Vegetation is a desert shrub type. Scattered vegetation included greasewood, shadscale, curly mesquite grass, globe mallow, bud sage, matt saltbrush, squirrel tail, prickly pear, cheat grass, halogeton and spring annuals.

Antelope, cattle, rabbits, coyotes, and small mammals, birds and raptors.

Moderately deep sandy loam with small gravel sized rock.

Soil Type and Characteristics

Moderately deep sandy loam with small gravel sized rock.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required? N

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? Paleo Potental Observed? Cultural Survey Run? Cultural Resources?

Reserve Pit

Site-Specific Factors	Site R	anking	
Distance to Groundwater (feet)	>200	0	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)	300 to 1320	10	
Native Soil Type	Mod permeability	10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)		0	
Affected Populations			
Presence Nearby Utility Conduits	Not Present	0	
	Final Score	25	Sensitivity Level

Characteristics / Requirements

Kayleen Gardner stated that a closed loop mud circulation system would be used rather than construct a reserve pit as shown in the Location Layout plan.

Closed Loop Mud Required? Y Liner Required? Liner Thickness Pit Underlayment Required?

Other Observations / Comments

3/1/2010 Page 2

Floyd Bartlett 6/10/2009 **Evaluator Date / Time**

3/1/2010 Page 3

Application for Permit to Drill Statement of Basis

3/1/2010 Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo				Statu	s W	ell Type	Surf Own	er CBM
1576	43047504440	000			SITL	A G	W	S	No
Operator	KERR-MCGI	EE OII	L & GA	AS (ONSHORE	, L.P. Su	urface Owner-APD		
Well Name	NBU 688-30I	Ξ				U	nit	NATURA	L BUTTES
Field	NATURAL E	BUTTE	ES			T	ype of Work	DRILL	
Location	NWNE 30	10S	21E	S	702 FNL	2029 FEL	GPS Coord (UTM)	620353E	4420061N
G 1 . G	, en .								

Geologic Statement of Basis

EOG proposes to set 2,300' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 4,300'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 30. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

Brad Hill 6/17/2009 **APD Evaluator Date / Time**

Surface Statement of Basis

The general area is within the Natural Buttes Unit in the middle portion of the Cottonwood Wash Drainage of Uintah County. The area is characterized by rolling hills and benches, which are frequently intersected by somewhat gentle draws. The draws are occasionally rimed with steep side hills, which have exposed sand stone bedrock cliffs along the rims. Cottonwood Wash is an ephemeral drainage, which drains northerly approximately 6 miles to the White River. No seeps, springs or streams exist in the area. An occasional pond, constructed to store runoff for cattle and livestock exists.

This location is approximately 16.5 road miles southeast of Ouray, Utah and is accessed by the Seep Ridge Road then by Uintah County and existing or planned oil field development roads to within 90 feet of the proposed site. New construction will be required from this point.

The proposed NBU 688-30E gas well pad is toward the north end of a broad flat. The north end of the pad breaks off into a small swale which will be filled during construction. This swale continues and becomes deeper as it joins one from the east. The combine draw continues into Cottonwood wash about $\frac{1}{2}$ mile away. No diversions are needed.

Kayleen Gardner stated that a closed loop mud circulation system would be used rather than construct a reserve pit as shown in the Location Layout plan.

The selected location appears to be a suitable site for drilling and operating a well, and is the best site in the immediate area

Both the surface and minerals for this location are owned by SITLA. Jim Davis of SITLA attended the on-site visit. He had no concerns regarding the proposal except as covered above. Ben Williams and Pat Rainbolt of the UDWR were also invited. Neither attended but Mr. Rainbolt forwarded an e-mail message stating the area is classified as yearlong crucial habitat for antelope but no restrictions are recommended. Also, that no other wildlife is expected to be significantly affected.

Application for Permit to Drill Statement of Basis

3/1/2010 Utah Division of Oil, Gas and Mining

Page 2

EOG was instructed by Mr. Davis to contact SITLA for reseeding and reclamation requirements when they are needed.

Floyd Bartlett
Onsite Evaluator

6/10/2009 **Date / Time**

Conditions of Approval / Application for Permit to Drill

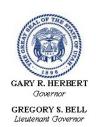
Category Condition

Pits A closed loop mud circulation system is required for this location.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED:	5/20/2009		API NO. ASSIGNED:	43047504440000
WELL NAME:	NBU 688-30E			
OPERATOR:	KERR-MCGEE OIL & GAS	ONSHORE, L.P. (N2995)	PHONE NUMBER:	435 781-9111
CONTACT:	Kaylene Gardner			
PROPOSED LOCATION:	NWNE 30 100S 210E		Permit Tech Review:	
SURFACE:	0702 FNL 2029 FEL		Engineering Review:	
воттом:	0702 FNL 2029 FEL		Geology Review:	
COUNTY:	UINTAH			
LATITUDE:	39.92400		LONGITUDE:	-109.59168
UTM SURF EASTINGS:	620353.00		NORTHINGS:	4420061.00
FIELD NAME:	NATURAL BUTTES			
LEASE TYPE:	3 - State			
LEASE NUMBER:	ML22793 PROP C	SED PRODUCING FORMATI	ON(S): WASATCH-NORT	H HORN
SURFACE OWNER:	3 - State		COALBED METHANE:	NO
RECEIVED AND/OR REVIE	WED:	LOCATION AND SITING:		
 ✓ PLAT		R649-2-3.		
▶ Bond: STATE/FEE - 619	96017	Unit: NATURAL BUTTES		
Potash		R649-3-2. General		
Oil Shale 190-5		_		
Oil Shale 190-3		R649-3-3. Exception		
Oil Shale 190-13		✓ Drilling Unit		
Water Permit: 49-225		Board Cause No: Cau	use 173-14	
RDCC Review:		Effective Date: 12/2/	1999	
Fee Surface Agreeme	nt	Siting: 460' fr u bdry	& uncomm. tract	
✓ Intent to Commingle		R649-3-11. Directiona	l Drill	
Commingling Approved	I			
Comments: Presite Co APD IS IN UPOD Stipulations: 3 - Com				

5 - Commingling - ddoucet 5 - Statement of Basis - bhill 12 - Cement Volume (3) - ddoucet 17 - Oil Shale 190-5(b) - dmason 25 - Surface Casing - hmacdonald



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: NBU 688-30E API Well Number: 43047504440000

Lease Number: ML22793 **Surface Owner:** STATE **Approval Date:** 3/2/2010

Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14. The expected producing formation or pool is the WASATCH-NORTH HORN Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Commingle:

In accordance with Board Cause No. 173-14, completion into and commingling of production from the Wasatch and Mesaverde formations is allowed.

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Cement volume for the 4 1/2" production string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 200' inside surface casing shoe as proposed in drilling plan.

Surface casing shall be cemented to the surface.

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan contact Dustin Doucet
- Significant plug back of the well contact Dustin Doucet
- Plug and abandonment of the well contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well contact Carol Daniels OR
- submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to cementing or testing casing contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
- contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 office
- Dustin Doucet 801-538-5281 office

801-733-0983 - after office hours

• Dan Jarvis 801-538-5338 - office

801-942-0871 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

Gil Hunt

Associate Director, Oil & Gas

Die Hunt

	FORM 9		
	STATE OF UTAH DEPARTMENT OF NATURAL RESOURD DIVISION OF OIL, GAS, AND MI		5.LEASE DESIGNATION AND SERIAL NUMBER: ML22793
SUND	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
	sals to drill new wells, significantly deepe igged wells, or to drill horizontal laterals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 688-30E
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047504440000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PH treet, Suite 600, Denver, CO, 80217 377	ONE NUMBER: 720 929-6515 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0702 FNL 2029 FEL QTR/QTR, SECTION, TOWNSHI Otr/Otr: NWNE Section: 30	I P, RANGE, MERIDIAN: Township: 10.0S Range: 21.0E Meridian	n: S	COUNTY: UINTAH STATE: UTAH
11.	CK APPROPRIATE BOXES TO INDICA		
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	☐ ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
3/1/2011	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN ☐ OPERATOR CHANGE	☐ FRACTURE TREAT ☐ PLUG AND ABANDON	☐ NEW CONSTRUCTION ☐ PLUG BACK
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
·	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:
Kerr-McGee Oil & G extension to this A	ompleted operations. Clearly show all post as Onshore, L.P. (Kerr-McGe APD for the maximum time all with any questions and/or co	e) respectfully requests an llowed. Please contact the omments. Thank you.	Approved by the Utah Division of Oil, Gas and Mining ate: 03/01/2011 y:
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBE 720 929-6156	R TITLE Regulatory Analyst	
SIGNATURE N/A	<u> </u>	DATE 3/1/2011	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047504440000

API: 43047504440000 Well Name: NBU 688-30E

Location: 0702 FNL 2029 FEL QTR NWNE SEC 30 TWNP 100S RNG 210E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 3/1/2010

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not

uire revision. Following is a checklist of some items related to the application, which should be verified.
 If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
 Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
 Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
 Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
• Has the approved source of water for drilling changed? Yes No
 Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? Yes No
nature: Danielle Piernot Date: 3/1/2011

Signature: Danielle Piernot

Title: Regulatory Analyst Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Sundry Number: 23759 API Well Number: 43047504440000

	STATE OF UTAH			FORM 9		
ι	DEPARTMENT OF NATURAL RESOUF DIVISION OF OIL, GAS, AND M			5.LEASE DESIGNATION AND SERIAL NUMBER: ML22793		
SUNDR	SUNDRY NOTICES AND REPORTS ON WELLS					
Do not use this form for pro current bottom-hole depth, r FOR PERMIT TO DRILL form	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES					
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: NBU 688-30E				
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.			9. API NUMBER: 43047504440000		
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 802		NUMBER: 720 929-6	9. FIELD and POOL or WILDCAT: 5M&TURAL BUTTES		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0702 FNL 2029 FEL				COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNSH	HP, RANGE, MERIDIAN: 30 Township: 10.0S Range: 21.0E Me	eridian: S		STATE: UTAH		
11. CHECK	K APPROPRIATE BOXES TO INDICA	CATE NAT	URE OF NOTICE, REPOR	RT, OR OTHER DATA		
TYPE OF SUBMISSION			TYPE OF ACTION			
NOTICE OF INTENT Approximate date work will start: 3/7/2012	CHANGE TO PREVIOUS PLANS		ER CASING NGE TUBING	CASING REPAIR CHANGE WELL NAME		
SUBSEQUENT REPORT Date of Work Completion:	CHANGE WELL STATUS DEEPEN	☐ FRAC	IMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE NEW CONSTRUCTION		
SPUD REPORT	OPERATOR CHANGE PRODUCTION START OR RESUME		G AND ABANDON LAMATION OF WELL SITE	☐ PLUG BACK ☐ RECOMPLETE DIFFERENT FORMATION		
Date of Spud:	REPERFORATE CURRENT FORMATION TUBING REPAIR		TRACK TO REPAIR WELL	☐ TEMPORARY ABANDON ☐ WATER DISPOSAL		
DRILLING REPORT Report Date:	WATER SHUTOFF	☐ SI TA	A STATUS EXTENSION	✓ APD EXTENSION		
40 0500005 000050 00	WILDCAT WELL DETERMINATION	ОТНЕ	ER	OTHER:		
Kerr-McGee Oil & G an extension to this	COMPLETED OPERATIONS. Clearly shown as Onshore, L.P. (Kerr-McCAPD for the maximum time with any questions and/or	Gee) re e allow	espectfully requests ed. Please contact	Approved by the Utah Division of Oil, Gas and Mining		
				Date: March 12, 2012 By:		
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUM 720 929-6156		ITLE Regulatory Analyst			
SIGNATURE N/A	. 20 020 0100	D.	ATE 3/7/2012			

Sundry Number: 23759 API Well Number: 43047504440000



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047504440000

API: 43047504440000 Well Name: NBU 688-30E

Location: 0702 FNL 2029 FEL QTR NWNE SEC 30 TWNP 100S RNG 210E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

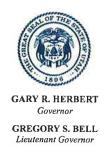
Date Original Permit Issued: 3/1/2010

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• If located on private land, has t Yes No	the ownership changed, if so, has the surface agreement been updated?
Have any wells been drilled in requirements for this location?	the vicinity of the proposed well which would affect the spacing or siting Yes No
Has there been any unit or other proposed well? Yes	er agreements put in place that could affect the permitting or operation of thi No
Have there been any changes to proposed location? Yes	o the access route including ownership, or rightof- way, which could affect th No
• Has the approved source of wa	ter for drilling changed? 🔘 Yes 🌘 No
	changes to the surface location or access route which will require a change in at the onsite evaluation? (Yes (No
• Is bonding still in place, which	covers this proposed well? 🌘 Yes 🔘 No
nature: Danielle Piernot	Date: 3/7/2012

Sig

Title: Regulatory Analyst Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

March 1, 2013

Luke Urban Kerr-McGee Oil & Gas Onshore, L.P. P.O. Box 173779. Denver, CO 80217

Re: <u>APDs Rescinded for Kerr-McGee Oil & Gas Onshore, L.P.</u>

Uintah County

Dear Mr. Urban:

Enclosed find the list of APDs that you requested to be rescinded. No drilling activity at these locations has been reported to the division. Therefore, approval to drill these wells is hereby rescinded, effective February 7, 2013.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

Environmental Scientist

cc: Well File

Bureau of Land Management, Vernal

SITLA, Ed Bonner



43-047-50435	NBU 686-30E	SITLA
43-047-50436	NBU 690-30E	SITLA
43-047-50437	NBU 689-30E	SITLA
43-047-50444	NBU 688-30E	SITLA
43-047-50546	NBU 696-25E	SITLA
43-047-50547	NBU 697-25E	SITLA
43-047-50548	NBU 698-25E	SITLA
43-047-50554	NBU 700-25E	SITLA
43-047-37738	NBU 1022-19F	BLM
43-047-37739	NBU 1022-19D	BLM
43-047-50807	NBU 684-19E	SITLA
43-047-37897	NBU 920-21E	BLM